

## WE CLAIM AS OUR INVENTION:

1. A microlancet device formed of silicon and having a sharp point for piercing the skin of a subject.
2. The microlancet device of Claim 1 wherein the microlancet device has a cross section between approximately 50 micrometers and approximately 250 micrometers.
3. The microlancet device of Claim 1 wherein the microlancet device has a length between approximately 1 millimeter and approximately 3 millimeters.
4. The microlancet device of Claim 1 and further comprising a nitride film deposited on the silicon substrate.
5. The microlancet device of Claim 5 wherein the nitride film has a thickness of approximately 2000 Angstroms.
6. The microlancet device of Claim 5 and further comprising coating of photoresist on the nitride film.
7. The microlancet device of Claim 5 and further comprising removing a portion of the nitride film.
8. The microlancet device of Claim 8 wherein the portion of the nitride film is removed by potassium hydroxide.

- 1        9.    The microlancet device of Claim 9 and further  
2        comprising a photoresist coating applied to the  
3        silicon wafer.
- 1        10.   The microlancet device of Claim 10 and further  
2        comprising patterning the silicon wafer with a plasma  
3        etching process.
- 1        11.   The microlancet device of Claim 11 and further  
2        comprising removing the photoresist coating.

- 1        12. A method-of constructing a microlancet device formed  
2        of silicon and having a sharp point for piercing the  
3        skin of a subject, the method comprising:  
4        providing a silicon substrate; and  
5        plasma etching the silicon substrate into a sharp probe  
6        for piercing the patient's skin.
- 1        13. The method of Claim 13 and further comprising etching  
2        the silicon wafer into a microlancet device having a  
3        diameter between approximately 50 micrometers and  
4        approximately 250 micrometers.
- 1        14. The method of Claim 13 and further comprising etching  
2        the silicon wafer into a microlancet device having a  
3        length between approximately 1 millimeter and  
4        approximately 3 millimeters.
- 1        15. The method of Claim 13 and further comprising applying  
2        a sulfuric acid/hydrogen peroxide mixture in water to  
3        the silicon wafer.
- 1        16. The method of Claim 13 and further comprising  
2        depositing a nitride film on the silicon wafer.
- 1        17. The method of Claim 17 wherein the nitride film has a  
2        thickness of approximately 2000 Angstroms.
- 3        18. The method of Claim 17 and further comprising applying  
4        a coating of photoresist on the nitride film.

- 1 19. The method of Claim 17 and further comprising removing  
2 a portion of the nitride film.
- 1 20. The method of Claim 20 and further comprising removing  
2 a portion of the nitride film with potassium hydroxide  
3 etchant.
- 1 21. The method of Claim 21 and further comprising applying  
2 a photoresist coating to the silicon wafer.
- 1 22. The method of Claim 22 and further comprising  
2 patterning the silicon wafer with a plasma etching  
3 process.
- 1 23. The method of Claim 23 and further comprising removing  
2 the photoresist coating.  
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